



Toyo Bio-Pharma™

## **TOYO-FVG™, nature's key to health**

The slow-growing pine tree, *Pinus maritima*, is known for its thick bark, the result of growing in the harsh coastal environment of Landes in southwest France. For centuries, the maritime pine has been respected for its health promoting properties. It is only in the last 50 years that the key component has been identified as oligomeric proanthocyanidin, or OPC, a polyphenol that is an aggressive antioxidant. This is the source of TOYO-FVG™, an important new product.

TOYO-FVG, a unique water-extract rich in OPC, contains more than twice the amount of most other pine bark extracts and is 80% polyphenol. It has superior efficacy, is more bioavailable and its recommended dosage is 30% less than the leading pine bark extracts. It can amplify the effects of most vitamins when used in combination with them, yet it is extremely safe with no known toxicity, mutagenicity or side effects.

Today, everyone needs nutritional support to overcome the negative impacts of environmental pollutants, increased stress, busy lifestyles and a diet stripped of necessary nutrients. All of these factors contribute to oxidation in the body and the release of free radicals, the process responsible for aging and the breakdown of healthy cells.

High in OPC, TOYO-FVG is a very strong antioxidant, working to absorb free radicals, as proven by the ESR test. By binding with free radicals, TOYO-FVG helps maintain cellular health.

TOYO-FVG is water-soluble, making it virtually clear in liquid solution. Its perfect solubility means that it won't settle out in solution and will maintain an even mixture without stirring or shaking. In the small amount needed to be effective, TOYO-FVG has a very light trace of color that will not discolor the skin, making it the perfect ingredient in skin creams and other topical products. It vitalizes the skin by encouraging healthy circulation to reduce the appearance of dark spots, puffiness, wrinkles and a dull, dreary look.

Utilize nature's  
secret ingredient  
in functional food and  
drinks, skin creams and  
nutritional supplements.



## **TOYO-FVG's Recipe for Success in Functional Foods and Beverages**

TOYO-FVG can make a wonderful new addition to sports drinks or energy bars. Its complete solubility and clarity in solution make it undetectable. It is easy to add to nearly any formulation due to its pleasant taste and the small amount needed to be effective. People are looking for healthy alternatives in midday snacks and drinks to help them maintain stamina through long and stressful workdays. TOYO-FVG can help you maximize profits and increase demand in sports nutrition products, drinks, teas and a variety of food products. TOYO-FVG's health benefits are substantial.

## **Cardiovascular Health**

Fundamental to all health and vitality, cardiovascular health is supported and improved substantially through the use of TOYO-FVG.

By neutralizing oxidizing agents — the by-product of cell metabolism, stress and busy lifestyle choices — it can support the entire circulatory system and overall health. Reports on the effects of TOYO-FVG in maintaining healthy lipid, LDL/HDL cholesterol and triglyceride levels already within the normal range, are available upon request.

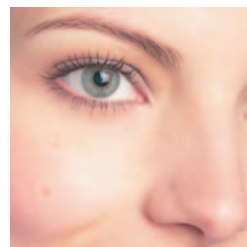
## **Dermal Health**

TOYO-FVG helps maintain the reduced toxin levels associated with healthy dermal circulation.\* TOYO-FVG promotes collagen production and a strong, vital collagen layer by fighting the free radical, collagenase, which could otherwise negatively affect the collagen layer and age the skin. This leaves the skin with superior tone and elasticity. In addition, a healthy collagen layer naturally holds moisture which greatly reduces the appearance of wrinkles and sagging skin.

Melanin, the natural agent that adds color to skin and acts as a protective shield, also becomes overactive as free radicals build up under the skin's surface. TOYO-FVG counteracts these free radicals so that age spots, dark circles and discolorations naturally fade away and disappear. This virtual "fountain of youth" actually delivers vitality to the skin from the inside by promoting good overall health.

TOYO-FVG has also been shown to stimulate the growth of hair when used in concentrations similar to popular hair regrowth treatments commonly available in the market today.

TOYO-FVG is both safe and effective. Reports on the effects of TOYO-FVG on dermal health are available upon request.





## Efficacy

Superior ingredients and manufacturing result in the highest quality product. TOYO-FVG has 40% OPC content and is 80% polyphenol. It has excellent oxidation-elimination capabilities, almost 3 times that of its closest competitor. In addition, it is up to 600 times more effective than vitamin C in inhibiting oxidation and is swift in eliminating free radicals, or oxidizing agents, both *in vitro* and *in vivo*.

Because of TOYO-FVG's excellent bioavailability and efficacy, it is needed in smaller concentrations. The typical dosage is only 40mg each day. Higher dosages may be needed for cardiovascular efficacy, according to data derived from clinical trials. This makes TOYO-FVG more cost effective and less conspicuous in every final product. Its pleasant taste is usually undetected due to the small amount needed.

## Manufacturing Quality

The pine bark is carefully harvested and shipped fresh to Toyo Bio-Pharma™'s parent company, Toyo Shinyaku Co., Ltd., one of Japan's premier manufacturers of dietary supplements, food ingredients and cosmetics. Here, it is carefully processed, using the most technologically advanced methods, into one of the finest products available today.

Among pine bark extracts, TOYO-FVG is distinct. A special grinding process opens up the cell walls to

release the potent OPC and polyphenol within the pine bark. The active ingredients are then pulled out by a unique water extraction process, leaving TOYO-FVG in the finished powder, liquid, gel or cream.

It is then refined, condensed and dried. It is available in 1kg and 3kg packages of pure, dry powder free of carrier agents, in liquid aqueous solution or in gel or cream bases. The powder varies from a golden color to light reddish brown. It is thoroughly soluble in solution making it nearly undetectable in drinks and semi-liquid creams. It has a shelf life of at least 24 months.

## The Company

Other formulations may be available, as Toyo Bio-Pharma has tremendous capacity and expertise in manufacturing custom formulations, conducting laboratory tests and validating results. The company has patented the manufacturing processes of TOYO-FVG in Japan, and is awaiting numerous patent approvals in the U.S. Toyo Bio-Pharma is Japan's largest developer and OEM producer of raw materials for food supplements. As such, Toyo Bio-Pharma is willing to work with clients on a contract basis, and has proven formulas that the company is willing to share for mutual success in advancing new markets.

The company follows the rigorous standards of ISO 9001:2000; and is GMP (FDA's Good Manufacturing Practices) compliant for food products. TOYO-FVG is designated as GRAS.



## Primary Benefits of TOYO-FVG as studied by Toyo Bio-Pharma

- + Cardiovascular health support
- + Healthy blood pressure support
- + Support of healthy cholesterol levels
- + Collagen support
- + Dermal circulation support
- + Antioxidant

 **TOYO-FVG™**

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**\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.**